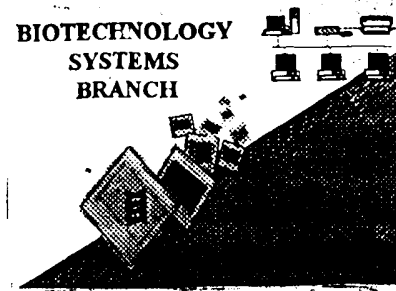


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/017,672
Source: 01PE
Date Processed by STIC: 12/31/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER**
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk CD-Rom or replacement disk CD-Rom, including:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)

2. U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202

3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

Or

U.S. Patent and Trademark Office, Reception Area, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 12/017,672

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 J Variable Length Sequence(s) 13-15 (maybe more) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

TIME: 12:47:15

Output Set: N:\CRF3\12312001\J017672.raw

PP 4-5

60-1220, FEATURE.

Does Not Comply
Corrupted Diskette Needed.

ACKNOWLEDGMENTS

RAW SEQUENCE LISTING

DATE: 12/31/2001

PATENT APPLICATION: US/10/017,672

TIME: 12:47:15

Input Set : A:\582316_1.txt

Output Set: N:\CRF3\12312001\J017672.raw

68 <223> OTHER INFORMATION: Xaa = Ile or Leu
 70 <220> FEATURE:
 71 <221> NAME/KEY: MISC_FEATURE
 72 <222> LOCATION: (4)..(4)
 73 <223> OTHER INFORMATION: Xaa = Leu, Ile or Thr
 75 <220> FEATURE:
 76 <221> NAME/KEY: MISC_FEATURE
 77 <222> LOCATION: (6)..(6)
 78 <223> OTHER INFORMATION: Xaa = Leu, Ile, Thr or Val
 80 <220> FEATURE:
 81 <221> NAME/KEY: MISC_FEATURE
 82 <222> LOCATION: (7)..(7)
 83 <223> OTHER INFORMATION: Xaa = Leu, Thr or Ile
 85 <220> FEATURE:
 86 <221> NAME/KEY: MISC_FEATURE
 87 <222> LOCATION: (8)..(8)
 88 <223> OTHER INFORMATION: Xaa = Leu, Thr, Ile or Gln
 90 <220> FEATURE:
 91 <221> NAME/KEY: MISC_FEATURE
 92 <222> LOCATION: (9)..(9)
 93 <223> OTHER INFORMATION: Xaa = Leu, Thr, Ile or Gln
 95 <400> SEQUENCE: 2
 97 Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa
 98 1 5
 100 <210> SEQ ID NO: 3
 101 <211> LENGTH: 9
 102 <212> TYPE: PRT
 103 <213> ORGANISM: Artificial Sequence
 105 <220> FEATURE:
 106 <223> OTHER INFORMATION: Synthetic Peptide
 108 <400> SEQUENCE: 3
 110 Glu Glu Glu Glu Tyr Phe Phe Ile Ile
 111 1 5
 114 <210> SEQ ID NO: 4
 115 <211> LENGTH: 9
 116 <212> TYPE: PRT
 117 <213> ORGANISM: Artificial Sequence
 119 <220> FEATURE:
 120 <223> OTHER INFORMATION: Synthetic Peptide
 121 <400> SEQUENCE: 4
 124 Lys Leu Ile Leu Tyr Leu Leu Leu Leu
 125 1 5
 128 <210> SEQ ID NO: 5
 129 <211> LENGTH: 13
 130 <212> TYPE: PRT
 131 <213> ORGANISM: Artificial Sequence
 132 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 12/31/2001

PATENT APPLICATION: US/10/017,672

TIME: 12:47:15

Input Set : A:\582316_1.txt

Output Set: N:\CRF3\12312001\J017672.raw

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138 Glu Glu Glu Glu Tyr Phe Phe Ile Ile Ala Lys Lys Lys
139 1          5          10
142 <210> SEQ ID NO: 6
143 <211> LENGTH: 13
144 <212> TYPE: PRT
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Synthetic Peptide
150 <400> SEQUENCE: 6
152 Lys Leu Ile Leu Tyr Leu Leu Leu Leu Ala Lys Lys Lys
153 1          5          10
156 <210> SEQ ID NO: 7
157 <211> LENGTH: 4
158 <212> TYPE: PRT
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Synthetic Peptide
164 <400> SEQUENCE: 7
166 Ala Lys Lys Lys
167 1
170 <210> SEQ ID NO: 8
171 <211> LENGTH: 13
172 <212> TYPE: PRT
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Synthetic Peptide
178 <400> SEQUENCE: 8
180 Glu Leu Ile Leu Tyr Leu Leu Leu Leu Ala Lys Lys Lys
181 1          5          10
184 <210> SEQ ID NO: 9
185 <211> LENGTH: 9
186 <212> TYPE: PRT
187 <213> ORGANISM: Artificial Sequence
189 <220> FEATURE:
190 <223> OTHER INFORMATION: Synthetic Peptide
192 <400> SEQUENCE: 9
194 Lys Leu Ile Leu Phe Leu Leu Leu Leu
195 1          5
198 <210> SEQ ID NO: 10
199 <211> LENGTH: 8
200 <212> TYPE: PRT
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Synthetic Peptide
206 <400> SEQUENCE: 10
208 Leu Ile Leu Tyr Leu Leu Leu Leu

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RAW SEQUENCE LISTING

DATE: 12/31/2001

PATENT APPLICATION: US/10/017,672

TIME: 12:47:15

Input Set : A:\582316_1.txt

Output Set: N:\CRF3\12312001\J017672.raw

214 <212> TYPE: PRT
 215 <213> ORGANISM: Artificial Sequence
 217 <220> FEATURE:
 218 <223> OTHER INFORMATION: Synthetic Peptide
 220 <400> SEQUENCE: 11
 222 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
 223 1 5 10 15
 226 <210> SEQ ID NO: 12
 227 <211> LENGTH: 25
 228 <212> TYPE: PRT
 229 <213> ORGANISM: Artificial Sequence
 231 <220> FEATURE:
 232 <223> OTHER INFORMATION: Synthetic Peptide
 234 <400> SEQUENCE: 12
 236 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
 237 1 5 10 15
 239 Lys Leu Ile Leu Phe Leu Leu Leu Leu
 240 20 25
 243 <210> SEQ ID NO: 13
 244 <211> LENGTH: 3
 245 <212> TYPE: PRT
 246 <213> ORGANISM: Artificial Sequence
 248 <220> FEATURE:
 249 <223> OTHER INFORMATION: Synthetic Peptide
 251 <220> FEATURE:
 252 <221> NAME/KEY: MISC_FEATURE
 253 <222> LOCATION: (1)..(1)
 254 <223> OTHER INFORMATION: Xaa = any amino acid except the non-degenerate
 phosphorylatable amino acid selected from the group consisting of Tyr, Ser and Thr
 256 <220> FEATURE:
 257 <221> NAME/KEY: MISC_FEATURE
 258 <222> LOCATION: (1)..(1)
 259 <223> OTHER INFORMATION: Xaa = from one through ten amino acids in length
 261 <220> FEATURE:
 262 <221> NAME/KEY: MISC_FEATURE
 263 <222> LOCATION: (2)..(2)
 264 <223> OTHER INFORMATION: Xaa = non-degenerate phosphorylatable amino acid selected
 from the group consisting of Tyr, Ser and Thr
 266 <220> FEATURE:
 267 <221> NAME/KEY: MISC_FEATURE
 268 <222> LOCATION: (3)..(3)
 269 <223> OTHER INFORMATION: Xaa = any amino acid except the non-degenerate
 phosphorylatable amino acid selected from the group consisting of Tyr, Ser and Thr
 271 <220> FEATURE:
 272 <221> NAME/KEY: MISC_FEATURE
 273 <222> LOCATION: (3)..(3)
 274 <223> OTHER INFORMATION: Xaa = any amino acid except the non-degenerate
 phosphorylatable amino acid selected from the group consisting of Tyr, Ser and Thr

variable length not permitted - see item 5
on Error
summary
sheet

item 5

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/017,672

DATE: 12/31/2001

TIME: 12:47:15

Input Set : A:\582316_1.txt

Output Set: N:\CRF3\12312001\J017672.raw

284 <214> TYPE: PRT
 285 <213> ORGANISM: Artificial Sequence
 287 <220> FEATURE:
 288 <223> OTHER INFORMATION: Synthetic Peptide
 290 <220> FEATURE:
 291 <221> NAME/KEY: MISC_FEATURE
 292 <222> LOCATION: (1)..(1)
 293 <223> OTHER INFORMATION: Xaa = any amino acid except Tyr
 295 <220> FEATURE:
 296 <221> NAME/KEY: MISC_FEATURE
 297 <222> LOCATION: (1)..(1)
 298 <223> OTHER INFORMATION: Xaa = from one through ten amino acids in length
 300 <220> FEATURE:
 301 <221> NAME/KEY: MISC_FEATURE
 302 <222> LOCATION: (3)..(3)
 303 <223> OTHER INFORMATION: Xaa = any amino acid except Tyr
 305 <220> FEATURE:
 306 <221> NAME/KEY: MISC_FEATURE
 307 <222> LOCATION: (3)..(3)
 308 <223> OTHER INFORMATION: Xaa = from one through ten amino acids in length
 310 <400> SEQUENCE: 14
 W--> 312 Xaa Tyr Xaa
 313 1
 316 <210> SEQ ID NO: 15
 317 <211> LENGTH: 3
 318 <212> TYPE: PRT
 319 <213> ORGANISM: Artificial Sequence
 321 <220> FEATURE:
 322 <223> OTHER INFORMATION: Synthetic Peptide
 324 <220> FEATURE:
 325 <221> NAME/KEY: MISC_FEATURE
 326 <222> LOCATION: (1)..(1)
 327 <223> OTHER INFORMATION: Xaa = any amino acid except Tyr or Cys
 329 <220> FEATURE:
 330 <221> NAME/KEY: MISC_FEATURE
 331 <222> LOCATION: (1)..(1)
 332 <223> OTHER INFORMATION: Xaa = from one through ten amino acids in length
 334 <220> FEATURE:
 335 <221> NAME/KEY: MISC_FEATURE
 336 <222> LOCATION: (3)..(3)
 337 <223> OTHER INFORMATION: Xaa = any amino acid except Tyr or Cys
 339 <220> FEATURE:
 340 <221> NAME/KEY: MISC_FEATURE
 341 <222> LOCATION: (3)..(3)
 342 <223> OTHER INFORMATION: Xaa = from one through ten amino acids in length
 344 <400> SEQUENCE: 15
 W > 346 Xaa Tyr Xaa

VERIFICATION SUMMARY

DATE: 12/31/2001

PATENT APPLICATION: US/10/017,672

TIME: 12:47:16

Input Set : A:\582316_1.txt

Output Set: N:\CRF3\12312001\J017672.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:43 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:540 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:608 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23